THE BIOLOGICAL FOUNDATIONS OF ORGANIZATIONAL BEHAVIOR

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Primal Business: Evolution, Kinship, and the Family Firm

Nigel Nicholson

OVERVIEW: THE FITNESS OF FAMILY FIRMS

In 2011, one of the world's leading, publicly traded family businesses—News Corporation International, headed by Australian media tycoon, Rupert Murdoch—was enveloped in scandal around allegations of illegal phone-hacking, collusion with the police, and invasions of privacy. This was clearly a turning point in the history of one of the world's leading family firms, compounded more recently by the quite public breakup of Murdoch's third marriage, raising fresh questions about ownership and inheritance. Without making comment on the political and ethical arguments swirling around this case, it is possible to look more dispassionately at it as a human drama, consistently explicable within the framework of evolutionary science.

One can see this thoroughly modern business as a contemporary manifestation of a primal business model of families working together on an enterprise to benefit their kin and their surrounding community. It is not unknown for this model to fail in the contemporary context—there are numerous recent examples (Gordon and Nicholson 2008)—through excessive nepotism, insularity, corruption, blinkered decision making, excessive attachment to relationships or products, succession disasters, or internecine warfare among kin or between kin and non-kin. At the same time, there are many exemplary family firms that stand the test of time and outperform their competitors (Dyer 2006; Miller and Le-Breton

Miller 2005). They do so through their capacity for fast and flexible decision making, indelible high-trust relationships with all their stakeholder groups, and powerful, positive family bonds and values suffused throughout the business—in short their ability to command an inimitable, sustainable, competitive advantage through their familial culture (Nicholson 2008). NewsCorp has shown both sides of this bivalence (Tagiuri and Davis 1996).

In this chapter I aim to show how family business is both a key topic in its own right that benefits greatly from evolutionary analysis, but I also use it as an exemplar to demonstrate the integrative capacity of evolutionary theory. In particular, I intend to show how one of the leading edges of evolutionary thought is about historical change: how coevolutionary forces shape our social institutions and the fate of business forms.

My argument proceeds through the following steps. First, I discuss the role of kinship in evolutionary theory and then the nature and status of the family as a vehicle for adaptive fitness. Then I discuss the intersection of work and kinship that family businesses embody and how their bivalent patterns of failure and success can be explained by evolutionary theory. This develops into a discussion in more detail of interior family dynamics of cooperation and conflict and how they are manifest in family firms, as well as what determines their differential patterns of adaptive and maladaptive form and function. I conclude with consideration of another leading edge of evolutionary theory—its treatment of the self, and how this may relate to the key topic of leadership.

BIOLOGY AND KINSHIP

The family is a fundamental biological entity. It can be defined as members of a species who interact and often co-reside for the purposes of procreation and the nurturing of offspring (Davis and Daly 1997). In many species this is a highly transient association, but in others—many birds, mammals, and some reptiles—the care of the young and mutual provisioning require more prolonged co-residence (Emlen 1997). Among primates, the family assumes even greater significance as a building block in complex social organization, reaching its most refined form in the clan, whose structure comprises interlocking family groups (Harcourt and Stewart 2007; Meder 2007). Families take many different forms. In some species pairs bond to provide exclusive and interchangeable care for their offspring. In others one finds haremic systems, where a single male corrals several females and their shared offspring. Among primates, one finds highly communal forms, with collective and reciprocal care for offspring and interbreeding among both related and unrelated group members (Imanishi 1960).

These kinship systems are closely coupled with the environmental niches and challenges that species face; that is, they are adaptive to contexts and the cycles of change that recur predictably within them, thereby constituting solutions to the problem of maximizing reproductive fitness over a range of recurrent circumstances (Megarry 1995). Kinship systems are born of multilevel selection processes. At the individual level, sexual selection, natural selection, and kin selection (the latter meaning design features and dispositions that aid the bearers of shared genes) direct the drives and orientations of individuals toward specific social forms, including mating preferences, nurturance of the young competition, status seeking, display, and social preferences (Cummins 2005; Tudge 1998).

COEVOLUTION AND THE HUMAN FAMILY

The historical development of kinship forms follows the logic of coevolution: human preferences shape social structure, including familial forms, which are simultaneously units of selection and socialization (Keesing 1975); that is, they are at the heart of the recursive processes of coevolution (Boyd and Richerson 1985). At the widest level of the breeding community, one finds among some species, especially the Great Apes, manifestations of what amounts to culture (Ghufran 2009; Sommer and Parish 2010). These are socially evolved customs in such elements as tool use, grooming, and forms of display (McGrue 1992). They have arisen to facilitate provisioning and social organization. These vary in ways that meet and master the selective pressures of their ambient environments, such as river, mountain, or forest habitats. Species and subsets of species adapt to the ecology of their environments, including such inputs as the presence of pathogens, predators, climate variation, and symbiotic relations with other life forms.

Relations within and between species—for example, between predators and prey-play a part in coevolutionary development, whereby changes in context act as filters for phenotypic fitness; that is, characteristics that confer advantage at one time can become liabilities at others (Darwin and Carroll 2003). This coevolutionary reasoning applied to humans has become known as dual inheritance theory, according to which cultures and genes coevolve. Cultures form critical aspects of the context within which the expression of genes results in successful or unsuccessful phenotypes (Henrich 2004; McElreath and Henrich 2007; Richerson and Boyd 2005; Sober and Wilson 1998). The ability of most adults to absorb lactated milk is an early example, arising during the millennia that witnessed the first agrarians and pastoralists.

So intense is human sociality that it is no exaggeration to say that other humans have always been a central focus of the context to which we must adapt. For something like a hundred and seventy thousand years, our species foraged and hunted in nomadic clans across savanna and tundra plains, bonded together by a loose, fluid, and largely egalitarian, clan-based social organization (Erdal and Whiten 1996; Whiten 1998). With the advent of agriculture and fixed settlements about ten thousand years ago, our adaptive focus shifted toward our cultural creations and social institutions (Klein and Edgar 2002). Religions, customs, social rules, and structures of authority historically altered the rules of the genetic inheritance game by shifting the criteria for selection. Sexual selection is especially open to this kind of moving bias—for example, tough fighters may be preferred in times of conflict, while intelligent and inventive partners are preferred in times of peace and plenty (Van Vugt, Hogan, and Kaiser 2008). The dual inheritance process is recursive, of course, which implies that humans can shape their own evolution via the adoption of norms and creation of cultures, a cultural form of what evolutionary theory terms "niche construction" (Laland 2007). Interestingly, these are not always adaptive, and, as history has shown us, some cultural forms prove unsustainable (Betzig 1993; Harris 1979). The story of family business is a microcosm of social experimentation: an intersection of culture, market and business environment, and kinship.

Humanity embodies many features that reflect our primate ancestry plus some distinctive aspects. All are social, but we humans have a particularly intense sociality—necessitated by the prolonged vulnerability of the neonate and facilitated by such factors as concealed female ovulation (Strassmann 1981). Alloparenting (parenting by non-kin) and adoptive relationships are common (Hrdy 2009) in our species. These factors favor complexity and fluidity in the human group, including the acceptance of adoptive and affinal (non-kin) relationships. We are inclined to give relatedness the benefit of the doubt. This is important, for adoptive relationships, though generally successful, are also risky and one of the chief causal factors implicated in violence against children (Daly and Wilson 1985).

The genius of the human design, and the source of our capacity for global domination as a species, is highly adaptive and multiformed social organization. This arises partly from the factors identified above namely, a propensity for group living and great flexibility in ways of living—as well as from special features of the human design (Barrett, Dunbar, and Lycett 2002). Principal among these are (1) tool use of great sophistication; (2) language facility of remarkable complexity; and (3) reflexive self-consciousness. Together these facilitate the power to imagine, create, and inhabit institutions and cultures.

THE CULTURAL EVOLUTION OF KINSHIP

Cultures frame and are regulated by systems of rules that govern how people work and live together, in the form of marriage laws, moral codes, inheritance rules, courtship customs, and various taboos. These forms differ widely, and contemporary evolutionary anthropologists identify both the selective pressures that give rise to these variations and their residue in human culture and history (Cronk and Gerkey 2007). Peoples of the desert, mountains, and rivers have evolved distinctive conventions of kinship and sociality that reflect the constraints of their environments natural hazards, food supply, resources, competition, threat, warfare, and the like (Low 2007). Religions are examples as cultural schema that guide people by codes that match the needs of their times—for example the simultaneous rise of industrialization and Protestantism.

Although the contingent link between environments and cultures is strong (Sperber 1996; Wilson 1998), it is not determining. As Richerson and Boyd (2005) show, there is a degree of arbitrariness, or rather willed choice, in the systems we adopt. The authors present examples of tribes living under identical conditions who, having adopted different marriage, inheritance, and property laws reap quite different outcomes, to the degree that the more successful colonize the less successful. Such assimilation is a major engine of cultural evolution. Richerson and Boyd argue that the norms of former cultures persist as residues in conditions where they no longer have relevance. They cite research identifying the roots of the culture of honor that persists in the southern United States, from their European pastoralist origins, where reputation is part of one's defense against marauding thieves, in contrast to the more confident, easygoing, and law-abiding agrarians of neighboring regions (Nisbett and Cohen 1996). One may reflect that such cultural echoes play a part in the cross-cultural variation to be found in family firms around the globe and even within polyglot economies.

This raises an important point. All forms of social organization are

successful to the degree that they are able to serve simultaneously the contingencies and challenges of ambient environments, on the one hand, and the dispositions, needs, and interests of the people who inhabit them on the other (Foley and Lahr 2011; Sperber 1996). The former are apt to change faster than the latter, many of which are species-general. The imperfections in this coevolutionary lock-step are what lead organizations, institutions, and indeed entire social systems to fail, as did communism, for example, by not meeting either requirement. In that case the ideology came into fundamental conflict with human instincts, partly because it deliberately incorporated the Lamarckian fallacy of the inheritance of acquired characteristics. It also failed to deliver economic outcomes that could satisfy the people's interests in consumption (Brenner 1993).

ADAPTATION AND DYSFUNCTION IN FAMILIES

The reasoning discussed above applies to the family. In many areas of the developed world, families are under great stress as divorce, poverty, lone parenting, homelessness, drug dependency, and crime afflict communities (Brandwein, Brown, and Fox 1974; Seccombe 2000). It has been suggested that widening wealth inequalities are responsible for weakening the bonds of cohesion and community that have hitherto marked our success as a species (Wilkinson 1996). In other words the untethering of market forces under capitalist economic systems is proving problematic for our communal human nature. To put it another way, economics has trumped our psychology: short-term incentives of consumption have damaged our long-term interests. This is fundamentally a problem of selfregulation—the psychological processes by which we defer gratification and plan for the long term (Carver and Scheier 1998; Karoly 1993).

Yet despite current dire prognostications about the breakdown of the family, it persists as an institution because of its unique capacity for efficient adaptation and need fulfillment (Becker 1981). However, cultural evolution is changing the shape, structure, and functioning of the family in ways that make it more fragile, coincidentally with increased complexity of demand. As societies develop economically, the strategy of maximizing fitness by maximizing one's family size (spreading the risk and sharing the labor) shifts decisively to concentrating parental investment in fewer offspring (due to reasonably assured longevity and increased resource competition). Thus one sees the amorphous, large family clan being supplanted by the "beanpole" family structure—"tall" from in-

creasing numbers of generations co-locating, and narrow from the reduced number of offspring (Markson 2003). This structural change has profound implications for the shape of family business. First, there is reduced choice in role adoption/allocation for family members and, by implication, greater risk to performance. A corollary is the shift, already occurring in areas of fallen birth rate, to greater emphasis on "responsible ownership" than on executive leadership, which is becoming increasingly professionalized (Family Business Network 2007).

FAMILIES AND WORK

The account just provided is also the story of family business. Among hunter-gatherers there is no concept of institutionalized work, nor of leisure; there are merely tasks that must be shared and executed if the community is to survive, supported by voluntary activities conducted for pleasure, such as adornment, education, and entertainment (Boehm 1999; Chagnon 1997; Coon 1979; Sahlins 1972; Whiten 1998). The division of labor is highly gendered. Males hunt, especially at long distance; females forage closer to the natal home range, yet many activities are shared between the sexes, including the making and use of tools for everyday living. The advent of agriculture brought increased structure to both time and place (Diamond 1997). Work now took place around fixed settlements, with the rhythm of life dictated by the seasons. Long periods of simple self-maintenance were punctuated by periods of intense activity. Crafts grew in importance, along with a host of activities associated with fixed settlements, but work and family were closely intertwined as units of both production and consumption. Innovations in transportation provided the basis for division of labor and the first industries (Landes 1998). The rest is history, as they say, as we have galloped into a world of commerce, trade, industrialized production, and financing.

Family businesses were among the first business organizations, and have persisted in markets. The oldest family business still in existence is a Japanese construction firm founded in 578, and multigenerational family firms have figured in every society up to the present day (O'Hara 2004), except where private ownership has been prohibited. But even in such systems, families often work together in the same factories as well as living together (Grieco 1988). Kinship bonds are compelling, offering security, belonging, and developmental opportunities. Family members generally help each other, as we discuss shortly (Stewart 2003).

PREFERENCES, PERSISTENCE, AND SUCCESS OF FAMILY BUSINESSES

Around the world, family businesses persist as a form, arguably because they represent one of the prime remaining examples of how work and love-two fundamental needs according to Freud and evolutionary theory—can be reconciled (Babcock 1998). Expressions of positive sentiments and shared, goal-directed activity are central to the continuing appeal of family firms. From an economic standpoint, they also solve an important agency problem: uniting accountability with ownership (Jensen and Meckling 1976). They raise other issues, which we explore below, but it does appear from an evolutionary perspective that they are the form of business that is closest to our nature, satisfying our preference for high trust exchange within a communal structure, with permeable and flexible boundaries between economic and social interests (Stewart 2003).

The popularity of the form is evidenced by its endurance, prevalence, and strength. Endurance is measured by age—and in addition to the Japanese construction company, many family firms have endured for well beyond double figures of generations of existence, giving the lie to the adage "clogs to clogs in three generations" ("shirtsleeves to shirtsleeves" in modern parlance), a maxim that occurs in many languages and cultures, capturing the belief that in family business the first generation founds the enterprise, the second develops it, and the third wastes the assets (Ward 2004). There is clearly no inevitability to this life cycle, though it does express the critical challenge that family firms face at key junctures of intergenerational transition (Kepner 1991), about which we say more later. We should also note that all small firms have a rising "death curve," called "the liability of newness" in entrepreneurship (Freeman, Carroll, and Hannan 1983). Part of the association with intergenerational succession is spurious—firms of all kinds at around the time a family business reaches its third generation may sell out or dissipate their assets, for a variety of reasons.

Indeed, one may observe that, far from weakening ties to the firm over generations, succeeding generations may feel a stronger attachment and obligation to keeping the firm going as part of its legacy and bloodline. However, what truth there is in the adage does stem from intergenerational discontinuities, which I discuss shortly.

The prevalence of family firms is universal. In every country with established market economies, family businesses make up a large proportion of total firms, in most between 60% and 90% (Colli 2003; Gersick et al. 1997). This calculation needs to be qualified by the observation that family firms are concentrated in the smaller, private, and unlisted sectors of business and hence account for a lower proportion of total employment—around 27% in the United States, for example (Shanker and Astrachan 1996; Astrachan and Shanker 2006). As in many other economies, a large proportion of total US employment is accounted for by workers in big listed corporations or in the public sector. How you count the numbers also depends on how you define a family business (Rothausen 1999). This is not a simple matter—high estimates are arrived at by including first-generation, founder-owned and run businesses, which may be justified on the grounds that many will continue to develop into multigenerational businesses. At the other end of the spectrum are large public corporations in which families retain a substantial interest, such as Ford or Wal-Mart. We need not dwell on the issue, but note that family businesses are found in every economy for the reasons we have discussed they are attractive as a "primal" form of organization.

THE UNIQUENESS OF FAMILY FIRMS

The strength of family firms comes from their unique characteristics. Much controversy is visible in the literature about the advantages and disadvantages of family firms. Some agency theorists assert that families are vulnerable to various kinds of moral hazards, especially altruism (e.g., nepotistic bias in resource allocation) (Schulze et al. 2001; Schulze, Lubatkin, and Dino 2003). Their argument runs that the sentiments and self-interest of family members lead them to make decisions and take actions that run counter to the economic interests of the firm. There is some truth in their argument, so the question is whether the countervailing advantages of family outweigh these risks, or whether the agency hazards can be easily overcome. The answer is that they can, to a degree. The strength (and vulnerability) of family firms comes from four sources, shown in figure 10.1.

- 1. Co-ownership by a kin-related group
- 2. Intergenerational transmission of ownership
- 3. Teamwork between kin and non-kin
- 4. Genetic wildcard inheritance

This also illustrates the risks associated with family firms. The point here is that the advantages of the primal origins of family firms are also points of weakness in the hyperrational world of market economies.

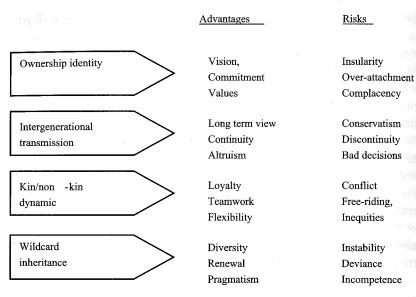


Fig. 10.1 What's unique about family business? Benefits and risks

Ownership Identity

Family co-ownership is the "genetic shareholding" that lends a business a grounded identity and a sense of purpose. This biological common interest enables the owners to generate an unusual degree of attachment to, and involvement with, what they own and produce—as one observer put it, there is great significance in having the "family name above the door" (Brokaw 1992). The benefits are high attention to quality, service, customer and supplier relations, and ethical conduct, plus access to extended and durable network structures (Aldrich and Cliff 2003).

The risks, in the world of changing markets and complex, high-speed decision-making, are over-attachment, insularity, complacency, and failures to seek advice (Gordon and Nicholson 2008).

Intergenerational Transmission

Intergenerational transmission transforms the nature of the firm's assets into a source of value that is inextricably linked with the fitness of the founder's bloodline stretching into the future. The mere possibility of the title and ownership of the business being handed through generations of a family completely alters the dynamic of the enterprise, making even first-generation owners of family firms inclined to take a view

beyond their own life span. As Anderson and Reeb (2003) put it in their study of the performance advantage of quoted family firms, "Founding families view their firms as an asset to pass on to their descendants rather than wealth to consume during their lifetimes" (1305). The family is the primary mechanism for the transmission of identity beyond one's life span (Emlen 1982), which gives family firms a special power to imbue their family owners and managers with meaning, self-sacrifice, and altruism. By-products include long-term strategic and financial perspectives (Aronoff, Ward, and Visscher 1995), "patient capital" to go with their extended time horizons (Donckels and Frohlich 1991), and a preference for financial strategies that will not put the firm at risk (Dreux 1990).

The dark side of these advantages is discontinuity at points of intergenerational transition, and overly conservative and risk-averse approaches to strategic and financial decisions, through their concern for preservation (Lyagoubi 2006). The agency hazard of altruism also arises from this factor.

Teamwork between Kin and Non-kin

Teamwork between kin and non-kin is essential for any family business to grow beyond the dimensions of a mom-and-pop store. Humans can be hostile to strangers, but are also more inclined to trade with them than fight (Ridley 1996), for cooperation and coalition with non-kin is much more essential to our success as a species than is "tooth and claw" conflict (Richerson and Boyd 1999). Kinship, rather than dividing groups, can be the glue that holds unrelated people together by providing a cultural nucleus than embraces non-kin in an inclusive clan-like spirit. As I have analyzed elsewhere, a chief source of advantage to family firms is their culture (Nicholson 2008). It is the ability of a firm to contribute "family capital" to the culture—the added value conferred by family identity with a business—that generates competitive advantage through social capital (Habbershon and Williams 1999; Nahapiet and Ghoshal 1988; Tokarczyk et al. 2007). This is achieved typically by value-driven leadership, often with a stewardship orientation that is coupled with effective partnership between kin and non-kin (Gomez-Mejia, Nunez-Nickel, and Gutierrez 2001; Miller and Le-Breton Miller 2006).

The risks include conflicting goals between owning and non-owning executives, family members free-riding, and inequitable treatment across the family/nonfamily divide (Ainsworth and Cox 2003; Gomez-Mejia, Larraza-Kintana, and Makri 2003).

Wildcard Inheritance

Wildcard inheritance refers to the behavioral genetics of families. Family members resemble each other much less than we might expect from a simple view of inheritance. Although many of the individual differences most associated with voluntary behavior—values, interests, personality, and abilities—are highly heritable (40-90% by most estimates from twin studies), most are encoded in non-additive gene combinations (Ilies, Arvey, and Bouchard 2006). Other factors coming to light in genetics, such as genomic imprinting, epigenesis, horizontal gene transfer, and gene regulatory networks also show how the genotype is not determined solely by the forces of selection (Fodor and Piatelli-Palmarini 2010). The net result is a low correlation on psychological attributes between parents and children and between siblings, with the exception of identical twins (Lykken et al. 1992). This has potential advantages, such as the dynamics of naturally occurring diversity and renewal from the infusion of new perspectives. One can also reason—as I have heard family business owners and leaders state that knowing they are secure in their position gives family leaders an incentive to be "servant" leaders (Greenleaf 1991)—surrounding themselves with talent, making pragmatic decisions, and avoiding self-interested and ego-defensive posturing. The risks of this randomness are the various negative consequences that come from defects of will and character that might befall family executives and owners, brought about by failures to assess the fit between individual characteristics and the demands of roles in the business (Gordon and Nicholson 2008; Judge, Piccolo and Kosalka 2009).

The overall challenge for family firms is to capture their primal advantage in their culture and operations. One way of looking at this is that they experience more extreme centrifugal and centripetal forces than other kinds of organizations. The centrifugal forces are the scope for disagreements among people who did not choose each other as associates; and the centripetal are the bonds of genetic relatedness that give them an overriding, shared genetic interest. In other words, they can tolerate more conflict than other kinds of firms because they have stronger bonds of affiliation to rescue them. But this is a risky game, and interpersonal conflicts prove to be most destructive of family firms.

THE DARWINIAN DYNAMICS OF THE FAMILY FIRM

This logic of the preceding discussion explains away any empirical controversy about the pros and cons of family firms. This amounts to a recognition that family capital, principally embodied in the inclusive ethos of the culture and the high-trust relationships among stakeholders (Nicholson 2008), has attendant risks through its dependence on the existence of a healthy family dynamic. The survivors who get it right have tangible advantages and enjoy a performance premium, yet it is a challenge to get to that point (Dyer 2006). Family firms have liabilities beyond "newness" in the shape of their emotional configurations. "Two sides of the same coin" is a well-worn cliché, but it does apply here-the bonds that create family capital are liable to interfere with the rational order of the firm, bias outcomes, and create irreparable fracture lines (Tagiuri and Davis 1992). The apparent controversies around whether family firms perform better or worse than nonfamily firms is not only a methodological or empirical problem but also a theoretical and operational one. Conventional measures of performance do not recognize the intangible value created by family firms—such as social capital, longevity, and philanthropy.

At root the problem is that merging these two orders—the emotional and the rational; work and nonwork—works well in the fluid communal context of tribal living, though even here family disputes can be a source of disruption, but in the segmented domains of modern living, they require strong discipline to be reconciled. Let us look at this on two levels: the potential areas of conflict that are species universals and those that are specific and unique to families.

Four Kinship-Conflict Dynamics

There are four forms of universal tensions in family firms that are biogenetic in origin, and they are common sources of derailment: nepotism, parent-offspring conflict, affinal bonds, and sibling rivalry.

Nepotism

Nepotism, the principle of favoring kin over non-kin, as we have said, is the glue that holds families and their enterprises together (Neyer and Lang 2003). Elsewhere I have written about what I call the "as if principle" (Nicholson 2000)—the idea that in the EEA (the environment of evolutionary adaptedness; the context in which humans evolved) dealing with a "stranger" was an exceptional occurrence—we mostly co-acted within communities of familiars, entering at birth and exiting at death. This means that now when we interact with people who are new to us, we quickly give them our trust, making an instinctive, implicit (favorable) assumption that we "know" them (unless they markedly differ from us in appearance and custom). This is one of the most important and least discussed features of modern life—how we cooperate in large-scale social entities with numerous bonds of trusting interdependence. Moments of betrayal by strangers are thus extremely painful and disappointing to us, often creating a lasting disposition to suspicion. The homophily phenomenon is underpinned by the "as if" principle (McPherson, Smith-Lovin, and Cook 2001), as is its converse, the tendency for stereotyping, low-trust dispositions toward people who are manifestly and physically different from us—implicitly not of our tribe—which is a prime cause of racism and other forms of discrimination (McVeigh and Sikkink 2005).

Family firms, like other businesses, have homophilic tendencies, drawing their staff from familiar constituencies. Mostly they are embraced by the family culture, but with the implicit understanding as to whose tribe it is. The climate of even the most enlightened family firms tends to have a paternalistic ethos, generating among their employees an aura of appreciative deference to the leading family. Nepotism toward the next generation is expected, even welcomed by members of the community, as a mark of commitment and continuity—valued in a world where market uncertainties often weaken loyalties. Loyalty is indeed a prominent value in family firms. This is also accompanied in many of them by secrecy and privacy, for family firms are notoriously impenetrable and autonomous. They run on cash with low debt, and when they do borrow, in many cultures they do so via interlocking networks of connections with banks and other investors. Indeed, successful family firms are often so cash-rich that their family offices operate as de facto private equity providers.

Senior nonfamily professionals are often reluctant to enter this world, and they are not always welcomed. This of course is fatal to growth, and "tissue rejection" by families of incoming executives is a recurrent problem (Gordon and Nicholson 2008). To overcome it, firms need to take special steps in terms of a prolonged and careful courtship process of mutual selection. This has to set clear boundaries of powers, accountabilities, and expectations, as well as governance structures that bring clarity and confidence to decision making. Such careful steps to achieving integration are increasingly needed, for the demography of the family makes it ever more imperative to integrate non-family leadership successfully. As commentators are apt to note, the future of the family firm is one of "responsible ownership," with the bulk of executive decision making devolved to the professionals.

Parent-Offspring Conflict

The second universal source of tension is parent-offspring conflict. Nepotism arises because of genetically shared interests—family is favored over nonfamily, according to the kin-selection principle. One may expect parents and offspring to have substantial shared interests, alongside their 50% shared genes. They do, and the harmony of many family firms is born of the love between generations. Yet, as Trivers (1974) pointed out, the potential for conflict lies in the 50% that is not shared. Parents have a powerful interest in seeing their genetic investment come to best fruition (as they see it) and will be concerned that their 50% material investment is wisely deployed by their offspring. Children, on the other hand are conscious that their 100% self-interest is self-directed. The scene is set for a battle for control—well-meaning parents seeking to shape their children's destiny to ensure the continued prosperity of the genes they carry, and children seeking to wrest control and resources from their parents to achieve power and autonomy.

In many family firms, parent-offspring conflicts are visible as battles of will through various proxies, such as the strategic direction of the firm, which, of course, is the repository of the entire family's wealth and resources—the embodiment of its genetic shareholding. Parent-offspring conflict occurs in four combinations—compounded by gender. The two same-sex combinations—father-son and mother-daughter—are infused with parents' consciousness of knowing what is best from their own experience and the children's desire to differentiate themselves from samesex role models. In the case of father-son relations, there is another potential amplifier of conflict: competitive egos (Davis and Tagiuri 1989). Sons are apt to assert and test their growing confidence and competence, and fathers apt to defend theirs against the weakening of age. Old stag and young buck lock horns in trials of proof. Nor are mothers and daughters immune from competition.

Historically documented conflicts between fathers and sons have periodically risen to extreme levels. Shakespeare dramatized many examples, including those where mothers ally themselves conspiratorially with a son's interests. This makes perfect sense in gene politics, for the bond with their offspring is much superior to the non-genetic, affinal bond they have with their mate—even in history to the point of patricide. In family wars, wives and mothers have often taken an important but largely hidden role in seeking to advance the interests of their children over those of their partners (Gordon and Nicholson 2008).

The third source of potential conflict is the affinal bond—the union between unrelated adults. There is an extensive literature on the biology of human mating and the biochemistry of love, and how it engineers bonds of passion that last long enough to give the best chance for more material commitments (offspring) to form the basis of a more lasting union (Fischer 2004; Kelly and Dunbar 2001). Thereafter the shared genetic investment in the young provides a platform for the endurance of family life. Assortative mating—young adults freely engaging in mate choice spurred by shared interests—is the foundation of the platform (Luo and Klohnen 2005), though in many cultures and traditions the interests of parents for political alliances between family clans directs more engineered partnerships. Arranged marriages, dowries, and the bride-price are part of the economic architecture of parental power.

Potential conflicts of interest are averted by the structure of rules and exchange (Harris 1977). In the context of family firms, these play a part by cementing business interests together via marriage and also ensuring that status—a key value in the dynamics of mate choice—is not compromised (Kaye 1999). It is in such dynamics that one often witnesses the crosscombinations of father-daughter and mother-son relations played out. with opposite-sex parents often taking a special interest in mate choice.

Divorce is the most obvious manifestation of the vulnerability of the affinal bond and represents a substantial threat to family firms at two levels (Dodd 2011). The first is the nascent business founded by marriage partners—the copreneurial enterprise (Marshack 1993). These are delicate arrangements and widely subject to recurrent difficulties caused by failures to realize and execute the mechanisms that sustain the achievement of common interests. Breakdown occurs through perceived inequities of inputs, problems of coordination through divergences of style and preference, and the intrusion of emotional conflicts into the operational space. As we explore later, these matters are highly individualized. In-law relationships are also potentially areas of tension in family firms through misaligned concepts of rights and belonging (Kets de Vries 1993; Marotz-Baden and Mattheis 1994).

The second level of vulnerability comes from more mature, multigenerational family business arrangements, in which family branches are sewn into more complex configurations, such as what is called the "cousin consortium" or, in more mature businesses, the "networked family business clan." At relatively early stages of the family firm life cycle,

breaches between families united by marriage can threaten the integrity of the business, and also at later stages if unprotected by their corporate governance (Carlock and Ward 2001). In cultures that practice polygamy, one can expect competition among wives seeking to advance the interests of their children. Analogous problems arise where the interests of children from a patriarch's successive marriages are pitted against one another.

Sibling Rivalry

This brings us to one of the prime and often most public of conflicts that afflict family firms—sibling rivalry. In evolutionary biology, the fight for survival among siblings is an extremely common phenomenon (Mock 2004). Take, for example, the great egret, a bird found in temperate areas, often close to water and grazing livestock. The male and female adults pair for life and lay two eggs in succession. The first hatches and is nurtured. When the second egg is laid and hatched, the emergent newborn is diligently and deliberately pecked to death by the firstborn, under the indifferent gaze of the parents! The evolutionary logic explaining this callousness is that the second egg is no more nor less than a backup plan B should the firstborn perish in its fragile infancy. This is a sound insurance strategy for a species that requires intense parental investment to secure a single, healthy offspring; hence the unsentimental stance toward protecting and nurturing that investment (Mock 2004).

How different is the situation for humans? As I have argued, although we are broadly accepting and not rigidly discriminatory in our approach to extended family relationships, we are nonetheless strategic in how we view our investments. Most parents eschew and indeed deny favoritism, but practice it nonetheless (Harris and Morgan 1991). An example is the behavior of parents toward preterm twins, where typically one is born notably weaker than the other. A test of the Darwinian prediction that the mother would devote more care to the stronger than the weaker was born out by observational evidence (Beaulieu and Bugental 2008). However, when children are healthy, parents may seek to equalize their offspring's advantages by lavishing more care on the weaker child. Other bases for favoritism may include parental identification and even the child's ability to elicit favorable responses from the parent, for, as behavior geneticists have shown, parental warmth is a heritable quality of the child (Plomin 1994). In other words, some kids are better at switching on parents' love than others.

The Darwinian game of family dynamics is thus a contest for the limited resources of parental investment. As Sulloway (2001) has argued, this is a miniature ecosystem in which the dependent parties, the children, have to develop strategies to maximize their fitness. In this contest the firstborn has an advantage and can quickly calculate which behaviors earn favor with parents. The only child enjoys peculiar advantages that may carry her on to success in life, though with the possible handicap of unrealistic expectations about her claims to advantage—the spoiledchild syndrome. The arrival of the next-born signals the onset of a psychic drama. The firstborn becomes immediately aware of a rival for parental time, affections, and resources and shows scaled-down little egret behavior, metaphorically pecking at his little sibling (Mock 2004). The laterborn for her part will soon enough figure out what game is being played and the need to develop a novel strategy for attracting benefits for herself.

Sulloway insists that for laterborns, rebellion against the established order is the optimal and preferred strategy against the conformist strategy that the firstborns deploy to maintain their dominance. There is mixed support for these predictions (Michalski and Shackelford 2002). It seems that this ecology shapes life "scripts" and behavioral strategies rather than personality, for personality remains firmly under the control of DNA and the genotype. Support for the "strategic" perspective comes from the work of Salmon (1999), who confirmed predictions about middleborns taking a position of relative detachment in this competitive game between the position of attached firstborns and vulnerable, insurgent laterborns.

Given what we know about how pervasive and strong the genetic origins of individual differences are, we need to consider how these constant sources of evolutionary conflict are played out in the unique configuration of each particular family. Sulloway's analysis of the family ecosystem can be broadly accepted, though the outcomes it predicts are highly contingent.

To this analysis we should pause to pay special attention to gender issues, to which other writers in this volume have also alluded. Researchers have been interested in the roles that women play in the family group and the challenges they face. In family firms, wildcard inheritance often brings women to the fore earlier than in other kinds of business. The question of what influence they bring to the conduct of family business has been less explored, but the gender-specific dispositions and preferences of women undoubtedly affect the climate of the family firm and its conduct (Brush 1992; Cole 1997; Danes and Olson 2003).

THE UNIQUE FAMILY

As we have intimated, behavior genetics points toward a more contingent configural conception of the family (Moynihan and Peterson 2001). The literature on friendship, attraction, and marriage suggests that some patterns of interpersonal similarity underlie parents' affinal bonds, but only when they have bonded by preference rather than external imperatives. This family dynamic is shaped by the wildcard genetic inheritance factor—in short, the character of one's children is a gene lottery. The gender of one's children is also a matter of chance, as is, to varying degrees, family size and age-spacing of the children.

All these elements figure in the climate and functioning of the family ecosystem, which confirms our expectation of extreme variation in the form, functioning, and success of family firms. One can infer that some families will be lucky—blessed with cooperative and complementary dispositions among their members. Others are cursed with recalcitrant personalities and implacable enmities that trigger a multitude of dysfunctional outcomes. Two sets of contingencies moderate these effects: cultural norms and intrafamilial processes, the latter sometimes a by-product of the former.

Let us look at culture first. It is said that Japanese mothers talk to their babies to pacify them, and American mothers to stimulate them. This is a nice illustration of dual inheritance theory—cultural expressions that mold consistent personal orientations among families. This coevolutionary viewpoint suggests that we may expect regional variations in the global character of family firms as a function of cultural conditioning and selective processes. For example, in the Far East, Confucianism is a powerful force for social cohesion, especially between generations, and this is reflected in the character of family firms in the region (Wong 1985; Yan and Sorenson 2006). Tribal forms pervade Africa and the Middle East, and complex clan structures predominate in the family firms of the Americas and Europe (Loomis and McKinney 1956). These variations are compounded by local regimes of tax, inheritance, and ownership conventions that affect the enterprise and its family governance. Networks, educational resources, advisory services, and a growing body of scholarly knowledge about the dynamics of family firms have arisen around the world to assist their adjustment to local legal, financial and cultural contingencies.

Much of the thrust of these resources is to help families regulate the pressures and conflicts that arise within their firms (Kellermans and Eddleston 2004). This is the second moderator of family firm climate and outcomes—the processes that families deploy for self-management. There is a degree of circularity here. Families' configural dynamic may make them incapable of solving their own problems, thus rendering them unfit to manage a firm, because family firms, by their nature, are apt to lock family members into collaborations that they would otherwise avoid, were it not for their co-dependence on the business. Many family firms fail after generations of amity by falling into the hands of a generation for whom the gene lottery has disposed that they will find it almost impossible to get along or find any way to regulate their conflicts.

Of course, there are numerous remedies for such situations that involve abandoning any attempt to work together and co-own, yet the ideology of kin selection made manifest in the family firm proves too compelling an obligation, even if it proves to be ultimately destructive.

THE MEDIATING SELF AND LEADERSHIP IN THE FAMILY FIRM

Darwinians have generally viewed notions of the self with suspicion, mainly because they are seen to reinstate such unhelpful and discarded notions as free will and dualism (Dennett 1995; Kurzban and Aktipis 2007). One can agree with the advocates of the modular mind that it is fallacious to embody the self as a homunculus (Kurzban 2010)—a person within a person—yet they may be undervaluing the special kind of consciousness that we humans possess (Donald 2001). Among Darwinians are several—myself included—who would argue that evidence from a wide range of sources supports the idea that reflexive self-consciousness is an evolved capacity that has taken humans far beyond other primates, as well as the hominids that preceded us (Heyes 1998; Tomasello 1999). Perhaps it has even taken us to a new level of development for Homo sapiens, since over the first hundred and sixty thousand years of our existence there is no evidence of advanced material culture, until what has been called the Great Leap Forward forty thousand years ago (Diamond 1991). The sudden appearance of a rich array of cultural artifacts has been attributed to the emergence of the self-aware ego (Leary and Buttermore 2003; Mithen 1996), because it enables the kind of reflexive cognition necessary for the notions of possession and reverence that are embodied in these artifacts.

Our advanced self-consciousness facilitates psychological inference (the "reading" of other minds), foresight, planning, empathy, personal reflection, and various quite sophisticated forms of self-regulation (Bandura 1982; Byrne and Whiten 1988; Humphrey 1980). Self-regulation

comprises the processes by which humans defer or reschedule goals, deliberate upon their own actions, and select among them in order to achieve desired outcomes, including the control of moods and emotions (Baumeister, Schmeichel, and Vohs 2007; Vohs and Baumeister 2004). Self-regulatory failures are visible in many manifestations, such as failings in impulse control, procrastination, and various addictions (Sayette 2004; Steele 2007; Wiederman 2004). Self-control and the exercise of willpower are seriously weakened when the executive ego is swamped by competing control demands, such as conditions of high cognitive load or emotional stress (Baumeister, Muraven, and Tice 2000; Fischer, Greitemeyer, and Frey 2007).

Self-regulation is highly relevant to leadership, where ego-control plays a major part (Van Knippenberg et al. 2005; Zaccaro, Kemp, and Bader 2004). Leadership, as we have seen elsewhere in this volume, is an adaptive function of social systems and may take different forms according to contextual contingencies, especially the states of mind and needs of followers (Van Vugt, Hogan, and Kaiser 2008; see also Spisak, Nicholson, and Van Vugt 2011). Family firm leadership exemplifies the point, especially when examined at the key generational stages of firm and family. In the owner-founder first stage of development, the model is the patriarchal, or more rarely, matriarchal leadership model. The relationship with followers is one of familial embrace—which often falls foul of the risks we have reviewed, where the embrace is stifling and resistant to outside advice. In the next one or two generations, partnership models become more important. They are vulnerable to the sibling and cousin contests we have considered, yet many family firms exhibit great strength through their sibling and cousin collaborations and divisions of labor. As one moves to the mature family firm, leadership, along with governance, becomes more complex.

Most contemporary leadership in complex organizations can be decomposed into different elements corresponding to the multiple roles a leader may have to face: managing the top team, deal-making with stakeholder groups, being a figurehead to the massed ranks of followers, using diplomacy with the outside world and political skills in the inside world of the business. In family business the additional layer of complication comes with the family role, since multiple branches and generations may have claims on the identity and purposes of the enterprise. Some mature family firms have hundreds of scattered owners and require elaborate governance systems to enable them to act and decide in consort.

Behavior genetics shows us how important heritable individual differences are to role performance (Ilies, Arvey, and Bouchard 2006; Judge

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et al. 2002) and to the fate of family firms, as we have seen earlier. Individual differences pose a challenge not just to leadership succession, but to the very essence of leadership and organizational effectiveness. The challenge is adaptability and its limits. A sophisticated view of selfregulation recognizes that hard-wired individual differences limit the room for maneuvering in the self-concept; leaders with extreme selfdelusions about their limitations are apt to self-destruct or to be neutralized or removed (Hogan, Hogan, and Kaiser 2011; Judge, Piccolo, and Kosalka 2009; McCall and Lombardo 1983).

I lack space in this chapter to analyze the transactional processes of the self that lead to these different outcomes. This I have sought to develop elsewhere (Nicholson 2011). Let us conclude by reflecting on an implication of the self-perspective for family firms that has yet to figure in the literature. This is the idea of collective self-identity concepts (Brewer and Gardner 1996). These seem likely to prove important in the broader context of cultural co-evolutionary processes. Self-reflective space is where notions of social and personal value can be stored and transacted. Pride, honor, reputation, spite, belonging, and the like are sentiments that are intimately connected with the self and are strongly represented in the cultural values that sustain groups, tribes, and families and guide their decisions and choices.

How social groups conceive of themselves and of their members can be seen as a form of group self-regulation, a concept as yet not conceived in the literature. Families are embedded in the norms of their cultural contexts. These vary in strength; the Indian family, for example, is arguably subject to stronger norms of conduct than the British family, yet both will absorb, reject, or modify these normative forces according to how the unique configuration of individual and collective dispositions and goals of family members is enacted. Clearly, in some cultural contexts there is greater scope for novel adaptive strategies versus open conflict than in others. The integration of evolutionary theory with elaborations of the self-concept across levels of analysis—to embrace even the extended self-concepts of peoples, races, and nations—opens up a rich vein for theoretical and empirical innovation in the social sciences and certainly, as we have seen, in the family business field.

CONCLUSION OF THE PROPERTY OF

This volume centers on the application of the new Darwinism to organizational behavior (OB), but it is plain that the former is more developed

and unified than the latter. As a psychologist, when I first encountered OB, I naïvely assumed it was a discipline, alongside the other subjects of business schools—economics, finance, marketing, operations management, and accounting. Studying industrial relations, I realized that OB was actually just another field of study on which various disciplines came to bear. Industrial relations strove (and failed) to be interdisciplinary as befits a field of study. Now I have come to doubt whether OB has even that status, since it consists of pockets of disciplinary specialists studying their subtopics with meso- or low-level theories and with ever larger methodological toolkits. This is true of many other business school disciplines except one, economics, which retains a true disciplinary status, albeit with multiple centers of gravity. One may speculate whether the reason that evolutionary economics exists—it even has its own journal—is because economists, largely consistent in their meta-theoretical assumptions and worldview, recognize and take note when challenged by a new paradigm: evolutionary theory. I doubt we will ever see an evolutionary OB, because OB itself lacks coherence, except perhaps as a label for a cluster of business school pedagogy. It is notable that in a recent special issue of The Academy of Management Review (Suddaby, Hardy, and Huy 2012) entitled "Where Are the New Theories of Organization?" not a single paper mentions evolutionary theory.

Given the state of OB, it is no surprise that such a volume as this will inevitably consist of a series of applications or demonstrations of how evolutionary theory can make fresh sense of and explain work in the various subfields of the OB cloud. One of these is family business. which assuredly is a genuine field of study; that is, an identifiable business phenomenon whose description and explanation require a synthesis of multiple disciplinary perspectives. This is true of most other topics in this volume, which renders each of them ideally suited to the consilience approach that the evolutionary frame compels (Wilson 1998).

Throughout history families have been a wellhead for the foundation of new businesses, and this continues to be true. Given the compelling advantages for families and economic outcomes, one can predict that they will always occupy a commanding and strategic position within market economies, although colored by local cultural and institutional conditions. This makes an understanding of their underlying dynamic a matter of fundamental importance. Within the family business field, the evolutionary perspective has not yet taken hold, but it clearly has considerable explanatory power, along with the capacity to integrate current theorizing: meso-level accounts from agency, stewardship, and resourcebased perspectives.

This review has been intended not just to demonstrate the integrative capacity of evolutionary theory, but also to show how family business is a microcosm through which transcendent issues about the co-evolution of social forms and processes can be viewed afresh. The relevance of self-identity processes has also been highlighted as a new domain for the extension of evolutionary theory.

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